## General Instructions

## Web-based Standards of Learning Technology Initiative

## High School Capacity Survey

The intent of the Web-based Standards of Learning Technology Initiative is to use Web-enabled systems to improve Standards of Learning instructional, remedial, and testing capabilities of high schools. Schools that have a high grade of 9 or above and that may have Fall Membership as of September 30, 2000 and 2001 respectively are included in this survey.

Although full implementation of the Technology Initiative is not scheduled until 2003, it is important that school divisions begin to prepare now for participation. The Department of Education has developed this *High School Capacity Survey* to establish baseline information on the current technological capacity of high schools. The information requested in this survey will be used to obtain a better understanding of the extent to which each high school is ready to participate in the SOL Technology Initiative. Additionally, it is expected that the Virginia General Assembly and other parties interested in improving technology capacity in Virginia's schools will request this information.

The *High School Capacity Survey* is an Excel 97 workbook and may be downloaded at the Standards of Learning Technology Initiative Web site at www.pen.k12.va.us/VDOE/Technology/soltech/soltech.html. The Excel workbook consists of a survey for the school division as well as a survey for each high school in the school division. The survey will pre-format itself with one survey per high school when the school division is selected from a drop-down list. The completed survey should be submitted to the Department of Education as an e-mail attachment (mailto:capacity@pen.k12.va.us) by November 15, 2000. **School divisions that have submitted a letter of interest in participating in a SOLTech demonstration project, must submit the survey on or before October 27, 2000.**

Due to the technical nature of the survey questions, it is recommended that the school division technology coordinator or the technology specialist who can most readily provide the information requested complete the survey. The survey requests information on the school division Internet connection, each high school's Internet connection, each high school Local Area Network, and the number and location of "Internet Connected and Capable" computers in each school. Information on telephones in classrooms and digital videoconferencing capability is also requested. To assist the technology specialists or coordinators who are completing the survey, data definitions have been provided for the survey questions. The red mark in the upper right hand corner of a cell indicates that a data definition has been provided. Placing the cursor over a cell with a red

marker prompts the definitions to appear. The data definitions have also been included in the *Step-by-Step Instructions* that follow these general instructions.

**Step-by-Step Instructions**

**Web-based Standards of Learning Technology Initiative**

**High School Capacity Survey**

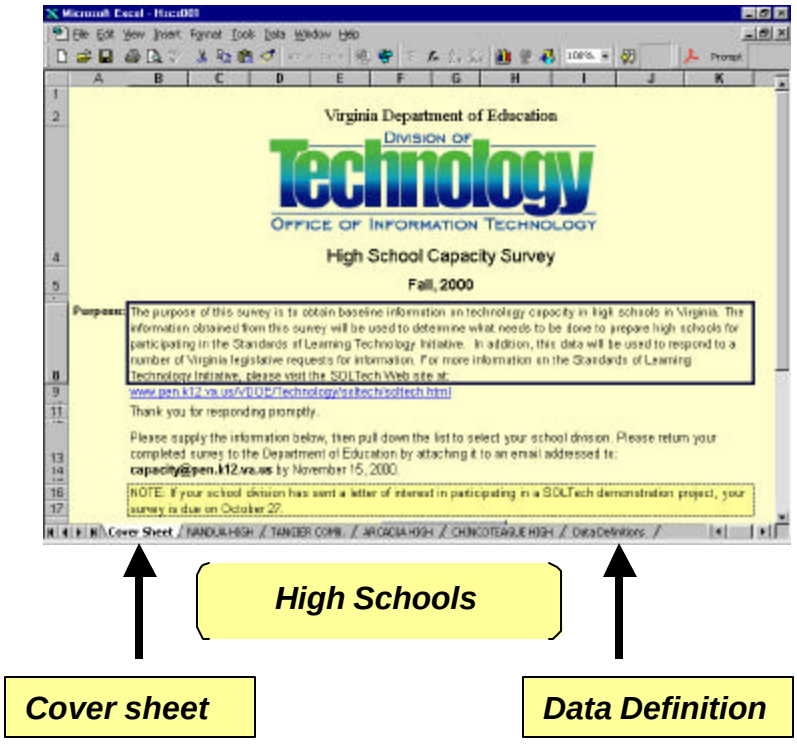
The *High School Capacity Survey* is an Excel 97 workbook.

To complete the survey, you will need to download the Excel file, "HSReadinessSurvey". You may choose where you wish to save this file, but it is recommended that you save the file to a network drive where it will be backed up frequently and will be accessible from more than one workstation.

Once the file has been saved, you will be able to enter data, save the file, and print a copy of the completed workbook.

Open up the "HSReadinessSurvey.xls" workbook in Excel.

The workbook consists of a **cover** worksheet, a worksheet for **each high school** in the school division, and a **data definitions** worksheet. For example, the *High School Capacity Survey* for Accomack County would have the following worksheets.



Left click on the *Cover Sheet* tab.

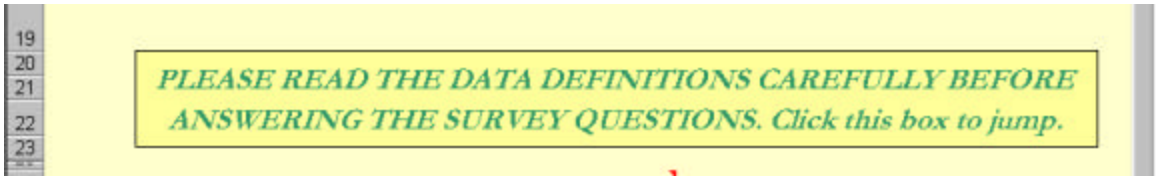
The purpose of this survey is to obtain baseline information on technology capacity in high schools in Virginia. The information obtained from this survey will be used to determine what needs to be done to prepare high schools for participating in the Standards of Learning Technology Initiative. In addition, this data will be used to respond to a number of Virginia legislative requests for information.

Left clicking on the link to the SOL Tech Web site will open in your browser the Web site that provides additional information on the Standards of Learning Technology Initiative. Closing the browser window will return you to the Excel worksheet.

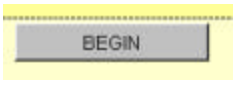
The survey must be completed and returned to the Department of Education by attaching it to an e-mail addressed to: capacity@pen.k12.va.us by November 15, 2000.

NOTE: If your school division has sent a letter of interest in participating in a SOLTech demonstration project, your survey is due on October 27.

Read the data definitions prior to answering the survey questions. Clicking on the reminder box shown below will take you to the worksheet where these definitions are located.

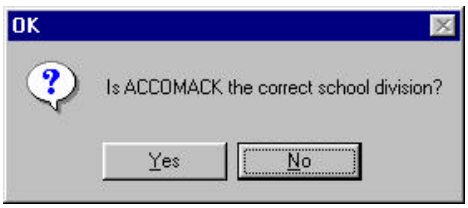



Left click on the *Begin* button to move directly to the survey questions on the *Cover* worksheet.

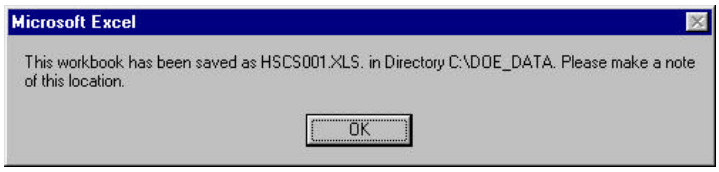



All contact information must be completed. This information will be needed in the event that follow-up questions or clarification is required.

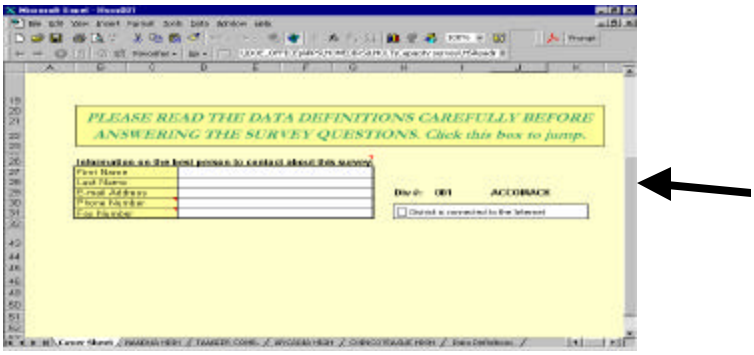
- Select your school division by clicking on the arrow to the right side of the <<SELECT SCHOOL DIVISION>> drop-down menu. Left click the name of your school division.
- You will be prompted to confirm your choice of school division.




- Left click *Yes* if you have selected the correct school division. Left click *No* if the correct name of your school division does not appear in the window, and repeat the process for selecting your school division.
- After clicking *Yes*, a window appears which tells you the name of the file and where the file has been saved.

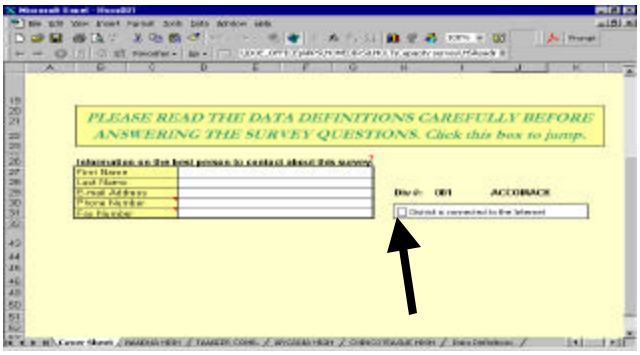



- You are now ready to enter your contact information. All information must be provided. You will note that some information was provided for you when the school division was selected.

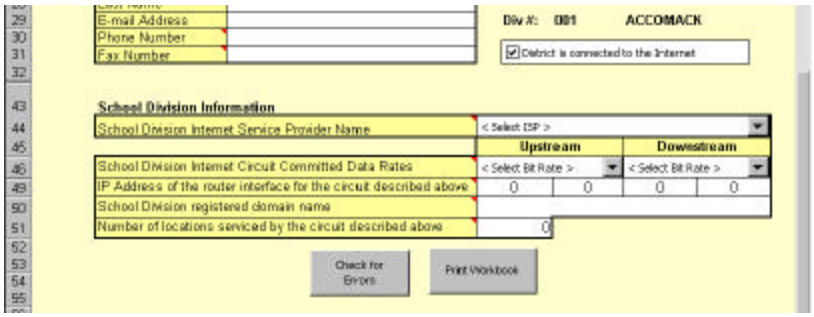



- Enter the first name of the best person to contact about this survey.
- Enter the last name of the best person to contact about this survey.
- Enter the e-mail address of the best person to contact about this survey.
- Enter the phone number of the best person to contact about this survey. Enter the phone number, including the area code, without formatting (5556667777).

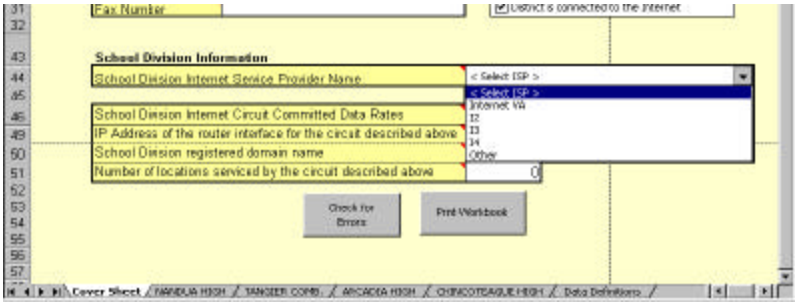
- Enter the fax number of the best person to contact about this survey. Enter the fax number, including the area code, without formatting (5556667777).
- If your school division is connected to the Internet, left click in the box.

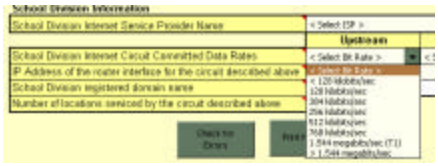



- If you have left clicked in the box to indicate that your school division is connected to the Internet, additional survey questions relating to the school division will appear.




- Select the name of the school division Internet Service Provider from the pull down list. If there is more than one ISP, select the ISP who provides Internet connectivity to instructional locations in the school division. If your provider is not on the list, select “Other” and enter the name of your provider in the space provided. This information will be used to compile a list of ISP’s for all school divisions in the state.

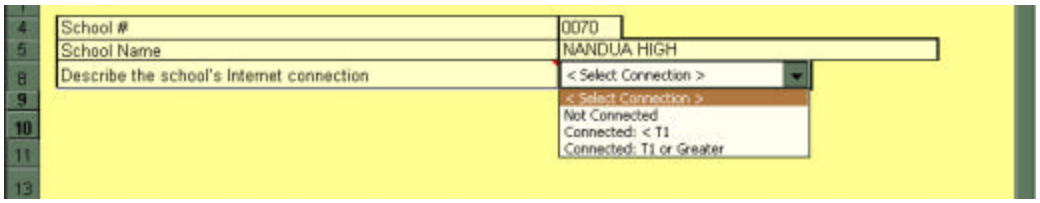




- Select the upstream and downstream committed data rates for the division's Internet circuit from the drop-down lists. Most circuits have the same data rate for both upstream and downstream. Some circuit types such as Cable and ADSL have different upstream and downstream data rates. If your committed data rate is between one of the choices given, select the next lowest rate. This information will be used as part of the analysis of your school division's capacity to participate in the SOL Technology Initiative.
- Provide the IP Address of the external router interface. Your Internet Service Provider normally provides this address. If you do not know the address, please go to a public traceroute server such as www.network-tools.com and conduct a trace. The last IP address provided in the trace list will give us the information we need. We need this information as part of the analysis of your school division's capacity to participate in the SOL Technology Initiative. We will be testing connectivity to your site.
- If your school division has a registered domain name, enter it. This information will be part of the analysis of your school division's capacity to participate in the SOL Technology Initiative.
- Provide the number of locations (schools, central office, etc.) served by the Internet circuit described above. In most cases, school divisions use one Internet Circuit to serve a number of locations. In some instances, each school has its own Internet circuit. This information is part of the analysis of your school division's capacity to participate in the SOL Technology Initiative.

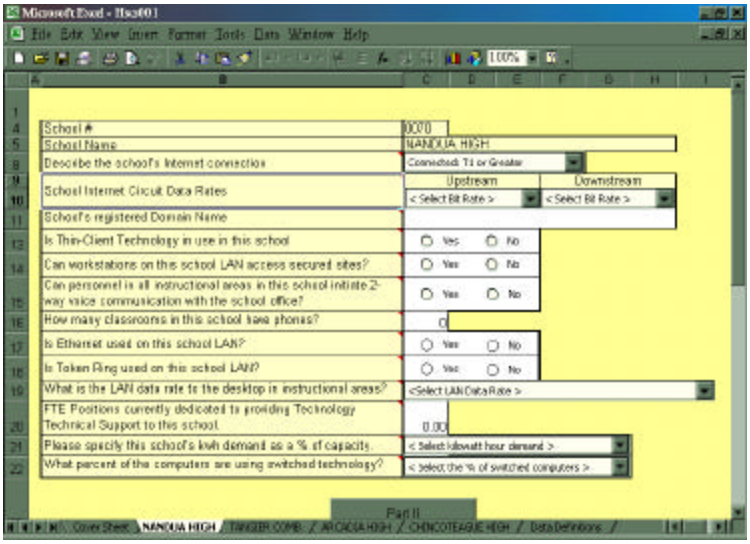
After you have completed the school worksheets, you will return to the *Cover* sheet, check for errors, and print a copy of the workbook.

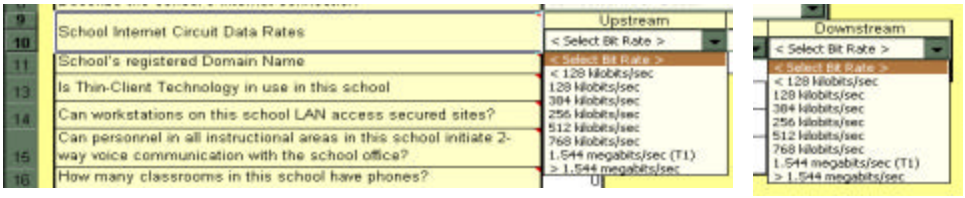
**When you selected your school division, tabs for each of the high schools in your school division were created. Click on each of these tabs and answer the survey questions.**




- The school number and school name have automatically been entered into the worksheet for each school.

- Select the statement that best describes the school's Internet Connection. Select "Not Connected" if the only source of Internet service to this school is via dial-up modems on individual computers.
- After you have selected the statement that describes your Internet connection, a window with additional survey questions appears.

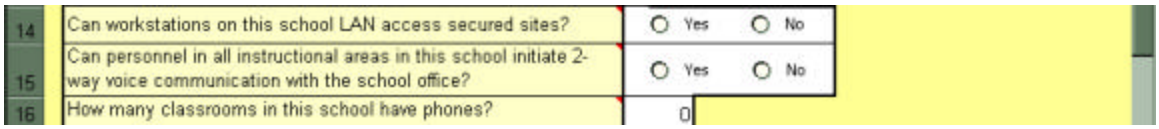



- Select the upstream and downstream data rates for the school's connection to the division or local WAN or the school's Internet circuit from the drop-down lists. Most circuits have the same data rate for both upstream and downstream. Some circuit types such as Cable and ADSL have different upstream and downstream rates. This

information is part of the analysis of the school's capacity to participate in the SOL Technology Initiative.


- Provide the school's registered domain name.
- If thin-client technology is in use in any instructional location in this school, answer, "Yes" to this question. Answer "No" if thin-client technology is not used in this school. A thin client, or NetPC, is a centrally managed computer typically designed to support specific tasks or applications that originate and execute on a server, with graphics executing on the desktop. This could be a "smart terminal" type of computer, such as a Wyse Winterm or an IBM NetVista, which provides graphical display services for GUI-Based applications that execute on a server such as a Citrix Winframe or a Microsoft Terminal Server. For the purposes of this question, Notebook Computers and PDAs such as Palms are NOT considered thin clients.

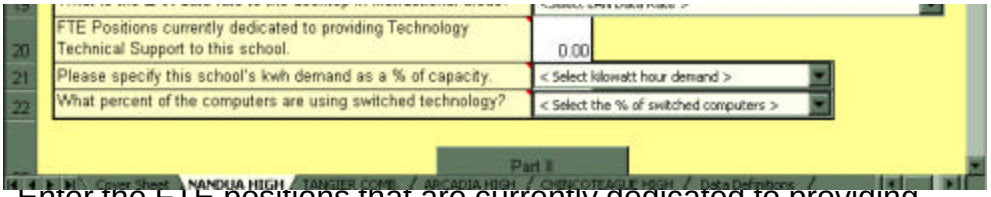



- Answer "Yes" if workstations on the school LAN are able to access secured Internet sites. Answer "no" to this question if secured sites are inaccessible to this school LAN due to blocking at the firewall or for some other reason. To determine the answer to this question, try accessing the site https://www.troweprice.com from a computer on the school LAN.

- Answer "Yes" if all classrooms are equipped with a telephone, intercom, or other two-way communication device for communication with the school office. Answer "No" if one or more instructional areas do not have this technology.
- Provide the number of classrooms in the school which have telephones.

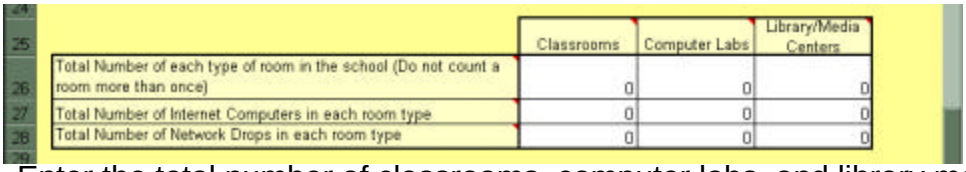

- Answer "Yes" if Ethernet is used on the LAN that serves the instructional areas in this school. Ethernet is a network protocol that uses CSMA/CD and runs over a variety of cable types at 10 Mbps and 100 Mbps (megabits per second).

- Answer “Yes” if Token Ring is used on the LAN that serves the instructional areas in this school. Token Ring is a network protocol which computers use to access the network through token-passing.
- Select the statement in the dropdown box that best applies to the LAN data rate to instructional areas in this school.




- Enter the FTE positions that are currently dedicated to providing technology technical support to this school. For example, if one technical person is responsible for four schools, enter .25 FTE positions.
- Left click the down arrow to display a drop-down window. Select the approximate percent of installed electrical capacity. This information may be obtained from an electrical engineer or someone in your maintenance department.
- Left click on the down arrow to display a drop-down window. Select the approximate percent of workstations in instructional areas of this school that utilize switched networking technology (workstations which are attached to switches instead of hubs).

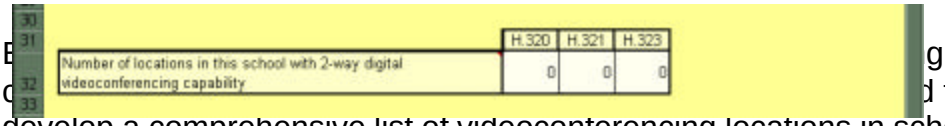

- questions.




- Enter the total number of classrooms, computer labs, and library media centers in the appropriate cells. A classroom is defined as a room or space that is primarily used as a classroom or resource room. A computer lab is defined as a room or space that is primarily used as a computer lab. A Library/Media Center is defined as a room or space that houses the school Library/Media Center.
- Provide the total number of Internet connected and capable computers in classrooms in this school. An Internet connected and capable computer is defined as a computer that is connected via the school

LAN (wired or wireless) running the TCP/IP protocol stack, and running Netscape 4.x or later OR Internet Explorer 4.x or later. Additionally, an Internet connected and capable computer is a Pentium, 133 MHz, 32 MB of RAM computer running Windows 95, Windows 98, Windows 2000, or Windows NT 4.0 OR PowerPC, 200 MHz, 32 MB RAM running MAC OS 8.5 or later OR thin client workstation with equivalent capability.

- Provide the number of network drops (typically single RJ-45 wall outlet connections) in classrooms, computer labs, and library media centers in this school. **DO NOT** provide the number of ports on hubs or switches. This information will be used to determine the average number of network drops per classroom in this school.

- 

g d to develop a comprehensive list of videoconferencing locations in schools in Virginia.

After you have clicked on the tab for each high school and answered all of the survey questions, return to the cover sheet.

Left click on the ***Check for Errors*** button.

A report of all errors will be generate 

may be viewed by clicking on the *Errors* tab that is created when you click on the ***Check for Errors*** button.

Correct all errors and left click on the ***Check for Errors*** button again.

Repeat this procedure until no errors are reported.

When all errors have been corrected and no errors are reported, you are ready to submit the workbook to the Virginia Department of Education as an e-mail attachment.

The entire workbook should be attached to an e-mail with the subject line “HS Readiness Survey 000” (where *000* represents the division number) when you submit your survey electronically to mailto:capacity@pen.k12.va.us.

The survey should be submitted no later than November 15, 2000. **School divisions that have submitted a letter of interest in participating in a SOLTech demonstration project, must submit the survey on or before October 27, 2000.**